AMENDMENT

Please cancel all pending claims (1 to 58 canceled herein).

Please add the following new claims:

59. (new) A method for the introduction of an agent into cells of a tissue, said method comprising:

a) introducing the agent into tissue; and

b) applying at least one voltage pulse between a plurality of opposing pairs of needle electrodes disposed in the tissue so as to establish an electric field in cells of the tissue sufficient to cause electroportion of cells in the tissue, thereby introducing said agent into the cells of the tissue.

60. (new) The method of claim 59, wherein the agent is introduced by injected either prior to, simultaneously with, or after step (b).

61. (new) The method of claim 60, wherein the agent is injected locally into the tissue.

62. (new) The method of claim 61, wherein the voltage pulses are applied to more than two pairs of said electrodes disposed in the tissue.

63. (new) The method of claim 59, wherein said method is in vivo.

64. (new) The method of claim 59, wherein the agent is selected from the group consisting of drugs, nucleic acids, polynucleotides, chemotherapeutic agents, peptides, polypeptides, and antibodies.

65. (new) The method of claim 64, wherein the agent is a polynucleotide selected from the group consisting of a DNA, a cDNA, and an RNA.

66. (new) The method of claim 65, wherein the polynucleotide is an antisense nucleic acid or ribozyme.

67. (new) The method of claim 65, wherein the polynucleotide encodes a protein selected from the group consisting of an immunomodulatory agent, a biological response modifier, a metabolic enzyme, and an antiangiogenesis compound.

68. (new) The method of claim 65, wherein the polynucleotide is contained in a viral vector.

69. (new) The method of claim 68, wherein the viral vector is selected from the group consisting of an adenovirus, a herpes virus, a vaccinia virus, and a retrovirus.

70. (new) The method of claim 69, wherein the viral vector is a retroviral vector that is a derivative of a murine or avian retrovirus.

71. (new) The method of claim 59, wherein the agent is a chemotherapeutic agent.

72. (new) The method of claim 71, wherein said chemotherapeutic agent is selected from the group consisting of bleomycin, neocarcinostatin, suramin, doxorubicin, carboplatin, taxol, mitomycin C, and cisplatin.

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73. (new) The method of claim 59, wherein the cells are tumor cells.

74. (new) The method of claim 73, wherein the cells are melanoma or basal cell carcinoma cells.

75. (new) The method of claim 74, wherein the tumor cells are subsurface tumor cells.

76. (new) The method of claim 59, wherein said tissue is mammalian.

77. (new) The method of claim 59, wherein said tissue is human.

78. (new) The method of claim 59, wherein said electrodes are contained in an array selected from the group consisting of a four needle, a six needle, an eight needle, a ten needle, a twelve needle, a fourteen needle, and a sixteen needle array of electrodes.

79. (new) The method of claim 59, wherein the electric field is from about 10 V/cm to about 2000 V/cm.

80. (new) The method of claim 59, wherein from about 1 to about 100 electrical pulses are applied.

81. (new) The method of claim 81 wherein each electrical pulse is from about 10 microsecs to about 100 msec in duration.

82. (new) The method of claim 59, wherein at least one electrical pulse is selected from the group consisting of a square wave pulse, an exponential wave pulse, a unipolar oscillating wave form, and a bipolar oscillating wave form.

83. (new) The method of claim 82, wherein each electrical pulse is comprised of a square

wave pulse.

84. (new) A method for the introduction of an agent into cells of a tissue, said method comprising:

a) introducing the agent locally into tissue by a route other than dermal absorption; and

b) applying voltage pulses to opposing pairs of electrodes disposed in the tissue so as to establish an electric field in the tissue sufficient to cause the agent to enter cells of the tissue, thereby introducing said agent into cells of the tissue.

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85. (new) The method of claim 84, wherein said electrical pulse is comprised of a square wave pulse.

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86. (new) The method of claim 84, wherein the route comprises rapid infusion.

87. (new) The method of claim 84, wherein the route comprises nasopharyngeal absorption.

88. (new) The method of claim 84, wherein the route comprises oral administration

89. (new) A method of electroporating an agent into cells of a tissue, comprising:

a) introducing a therapeutic agent into a tissue of a patient in need of treatment; and

b) using an electrode apparatus placed in contact with the tissue to deliver voltage pulses that establish electric fields sufficient to introduce the therapeutic agent into cells of the tissue by way of electroporation, wherein the electrode apparatus comprises:

i. a support member having disposed thereon two or more opposing pairs of needle electrodes arranged relative to one another to form an electrode array; and

ii. a power supply in electrical communication with pairs of needle electrodes disposed in the support member, wherein the power supply provides voltage pulses to at least two of the opposing pairs of needle electrodes to effect electroporation.